

FEDELESOVA, M.; ZIEGELHOFER, A.; HUBKA, M.; Technicka spolupraca:
CERNUSAKOVA, M.; HROCHOVA, L.; BRICHTOVA, A.

A study of the changes of various substrates and of enzyme
activity in mitochondria of the isolated dog heart after
hypothermic storage. Bratisl. lek. listy 45 no. 5:265-272
15 Mar '65

1. Ustav experimentalnej chirurgie Slovenskej akademie ved
(riaditel: akademik K. Siska).

ZIEGELHOFFER, A.

Use of an antimony electrode for measurement of the blood pH. Bratisl.
lek. listy 42 no.4:199-202 '62.

1. Z oddelenia experimentalnej chirurgie (veduci clen korespondent
CSAV K. Siska) Ustavu experimentalnej mediciny SAV, riaditel clen
koresp. SAV J. Antal.

(HYDROGEN ION CONCENTRATION blood) (ANTIMONY)

HUBKA, M.; SUJANSKY, E.; SILVAY, J.; FEDELESOVA, M.; ZIEGELHOFFER, A.

Current status of the problem of artificial asystoles. Bratisl.
lek. listy 43 Pt. 2 no.4:185-189 '63.

1. CSAV - Oddelenie experimentalnej chirurgie Ustavu experi-
mentalnej mediciny SAV v Bratislave, veduci akademik CSAV K.
Siska,

(HEART ARREST) (HEART SURGERY)
(HEART, MECHANICAL) (HYPOTHERMIA, INDUCED)
(POTASSIUM) (MAGNESIUM SULFATE) (NEOSTIGMINE)

HUBKA, M.; PEDELESOVA, M.; ZIEGELHOFFER, A.; SUJANSKY, E.; SILVAY, J.

Changes in glycolide and energy metabolism of the myocardium during artificial asystoles under experimental conditions. Bratisl. lek. listy 43 Pt. 2 no. 4:189-196 '63.

1. CSAV - Oddelenie experimentálnej chirurgie Ústavu experimentálnej medicíny SAV v Bratislave, vedúci akademik CSAV K. Siska.

(HEART ARREST) (HEART MECHANICAL) (MYOCARDIUM)
(ENERGY METABOLISM) (HYPOTHERMIA, INDUCED)
(CARBOHYDRATE METABOLISM) (GLUTATHIONE)
(ASPARTATE AMINOTRANSFERASE)
(ADENINE NUCLEOTIDES)

HUBKA, M.; ZIEGELHOFFER, A.; FEDELESOVA, A.; SILVAY, J.; SUJANSKY, E.

Changes in the acid-base equilibrium and concentration of cations in artificial asystoles under experimental conditions. Bratisl. lek. listy 43 Pt. 2 no.4:197-204 '63.

1. CSAV - Oddelenie experimentalnej chirurgie Ustavu experimentalnej mediciny SAV v Bratislave, veduci akademik CSAV K. Siska.

(ACID-BASE EQUILIBRIUM)	(HEART ARREST)
(HYPOTHERMIA, INDUCED)	(OXIMETRY) (SODIUM)
(POTASSIUM) (CALCIUM)	(HEART, MECHANICAL)

10 GELHOTTER, A.

- Copyright: Koss
1. "Experience with a Percutaneous Transhepatic Cholangiography." M. KATZKY, M.D., Department of the Research Institute for Oncology (VMA), Ministry of Health, Bratislava, 1960, pp. 1-10. (Slovak Academy of Sciences, Bratislava, 1960, pp. 1-10.)
2. "Applicability of an Intravascular Electrode for the Measurement of Blood pH." A. GELHOTTER, M.D., of the Department of Experimental Surgery (VMA), Ministry of Health, Bratislava, 1960, pp. 1-10. (Slovak Academy of Sciences, Bratislava, 1960, pp. 1-10.)
3. "Thromboendarterectomy of the Carotid Artery, Peripheral Arteries and Experience with Autotransplantation." V. KATZKY, M.D., of the First Clinic of Surgery (VMA), Ministry of Health, Bratislava, 1960, pp. 1-10. (Slovak Academy of Sciences, Bratislava, 1960, pp. 1-10.)
4. "The Problem of Radical Radiotherapy of Bronchial Carcinoma." Z. KURJAK, M.D., Faculty of Medicine (VMA), Bratislava, 1960, pp. 1-10. (Slovak Academy of Sciences, Bratislava, 1960, pp. 1-10.)
5. "Electrophysiological Examination of the Muscular Tissue During Central Nervous System Lesions." P. KATZKY, M.D., Department of Clinical Electrophysiology (VMA), Ministry of Health, Bratislava, 1960, pp. 1-10. (Slovak Academy of Sciences, Bratislava, 1960, pp. 1-10.)
6. "The Problem of the Intravascular Electrode for the Measurement of Blood pH." A. GELHOTTER, M.D., Department of Experimental Surgery (VMA), Ministry of Health, Bratislava, 1960, pp. 1-10. (Slovak Academy of Sciences, Bratislava, 1960, pp. 1-10.)

SPANAR, Eugen, MUDr.; ZIEGELHOFFEROVA, M.

Anabolism of testosterone by proteins and its use in
asthenia. Cas. lek. cesk. 91 no.29:861-867 18 July 52.

1. Z Endokrinologického léčebného ústavu v Lubochni.
(TESTOSTERONE, therapeutic use,
asthenia, anabolism by proteins.)
(ASTHENIA, therapy,
testosterone, anabolism by proteins.)
(PROTEINS,
anabolism of testosterone in ther. of asthenia.)

SPANAR, E.; VARGA, I.; KELLEN, J.; DUBAJ, J.; ZIEGELHOFFEROVA, M.

An attempt to evaluate the chromatographic differentiation of
17-ketosteroids in pulmonary tuberculosis. Bratisl.lek.listy 35
no.6:321-336 31 Mar 551

1. Z endokrinologickeho liscebneho ustavu v Lubochni prednosta dr.
Eugen Spanar, a z plucneho oddelenia nemocnice v Ruzomberku, pred-
nosta dr. Imrich Varga,

(URINE,

17-ketosteroids, chromatographic differentiation in pulm.
tuberc.)

(TUBERCULOSIS, PULMONARY, urine in,

17-ketosteroids chromatographic differentiation)

SPANAR, E.; KELLEN, J.; DURAJ, J.; ZIEGELHOFFEROVA, M.

Studies on pathogenesis of asthenia. Bratisl. lek. listy 34
no.4:377-389 Apr '54.

1. Z Endokrinologického liečebného ústavu v Labochni, prednosta
dr. E.Spanar.
(ASTHENIA, etiology and pathogenesis,)
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A simple synthesis of multisubstituted ethanes. I
Tetra(p-hydroxyphenyl)ethane. R. Ziegler and W. Klem-
entschitz (Univ. Graz, Austria). *Monatsh.* **91**, 1113-10
(1960).—Heating of 120 g. PhONa and 270 cc. $\text{Cl}_2\text{C}:\text{CHCl}$
4 hrs. in an autoclave at 175-80°, treatment with H_2 , and
fractional distn. in vacuo yields 30 g. dichlorovinyl Ph
ether (I) (Swiss 240,117, C.A. 43, 7006b), m. 85.6°. Hydro-
genation of I in the presence of PtO₂ gives PhOH. Treat-
ment of I (20 g.) with HCl gas for 30 hrs. under irradiation
yields after fractional distn. in vacuo, trichloromethyl Ph
ether (II), bp 136-20°. Heating 2 g. I with 2 g. PhOH 1
hrs. yields 60% 1,1,2,2-tetrakis(p-hydroxyphenyl)ethane

(III), m. 209-300°. III (65%) is also obtained from II
with PhOH. Methylation of III with Me_2SO yields 1,1-
2,2-tetrakis(p-methoxyphenyl)ethane (IV) (Bergmann and
Fujise, C.A. 25, 812); ethylation yields the EtO compd
[Gattermann, Ber. 28, 2875 (1895)]; acetylation gives
1,1,2,2-tetrakis(p-acetoxyphenyl)ethane (V), m. 283°; re-
action with NaNO_2 yields probably 1,1,2,2-tetrakis(3-
nitro-4-hydroxyphenyl)ethane, yellow rods, m. above 300°;
and oxidation with CrO_3 gives (p-MeOC₆H₄)₂CO and un-
saturated acid. III, IV, and V had no estrogenic activity.

Peter Bretfeld

1951

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Organic Chemistry - 10

Cleavages with diazonium compounds. XI. Phenolphthalein. Relationship between constitution and biologic action. B. Ziegler and H. Toppler (Univ. Graz, Austria). *Z. Naturforsch.* 7b, 122-4 (1952); cf. C.A. 45, 10210c. — Phenolphthalein (I) and 2 mols. $\text{o-O}_2\text{NC}_6\text{H}_4\text{N}_2\text{Cl}$ reacted in 5% NaOH, with sufficient NaOH added during the reaction to maintain the alkali, to yield 10% 2,4-($\text{o-O}_2\text{NC}_6\text{H}_4\text{N}_2$) $_2\text{C}_{10}\text{H}_6\text{O}_4$, m. 213°; acetate, yellow-red needles, m. 160-70°. o-Cresolphthalein and 2.2 mols. PhN_2Cl in 4 mols. 5% NaOH gave a product yielding on recrystn. from AcOH 5,1,3-(PhN_2) $_3\text{C}_{10}\text{H}_6\text{O}_4$, m. 116-17°, and the AcOH filtrate contained an unknown substance, m. 217-8°. The relationship between the reactive groups of I and its pharmacol. action is discussed. A. Dietz

CA

Syntheses and conversions of tertiary aliphatic-aromatic
alcohols of the ethylene series II. Action of sulfuric acid
on methylphenylvinylcarbinol and methylbenzylvinyl
carbinol. A. I. Lichkova (A. A. Zhukovskii State Univ.,
Leningrad). *J. Gen. Chem.* U.S.S.R. 20, 431-6 (1950)
(Engl. translation). —See C.A. 44, 7732d. R. M. S.

Clearance with diazonium compounds. VI. Hydrazo-
benzylamines and their N-acyl derivatives. G. Ziegner,
E. Ziegler, P. Assman, and E. Wiesenberg (Univ. Graz,
Austria). *Monatsh.* 81, 184 (1950); cf. C.A. 43, 1855d.
Phenols and α -ClCH₂CO₂NHCl (ROI) from R- and R'-
CONHCH₂OH (ROI) in concd. HCl form R- and R'-
substituted phenols. Hydrolysis of 2,4-RMe-
-CH₂NH₂.HCl (R') radicals and hydrolysis of 2,4-RMe-
-CH₂NH₂.HCl (R') gives the 2-HOCC₆H₃CONHCH₂-
(R'') analog. These ammonium salts, in alk. soln. from
groups are replaced by diazonium compds. in the 1-position of
the para position of phenols and from the ortho position
of naphthols. They are not split out from the ortho position
if there is a p- or o-H to be replaced. Thus, α -MeCH₂OH
and ROI give α -RMeCH₂OH (II), m. 107°, which, cou-
pled with α -RMeCH₂NHCl (III) gives 2,4-Me(p-O₂NC₆H₃-
-CH₂OH and ROI. Hydrolysis of I gives 2,4-R'-MeC₆H₃-
-CH₂OH and ROI. Hydrolysis of I gives PhN₂Cl (V) gives
ROI (IV), m. 104°. III coupled with PhN₂Cl (V) gives
2,4,6-R'-MeC₆H₃-CH₂OH, m. 104°. α -RCH₂OH and
ROI give 2,4-R(p-O₂NC₆H₃-CH₂OH, m. 220-1°. The

following were prepared (typical coupling agent, product, and m.p. of product, resp., given): I, 2-H¹CalOH, m. 12-13°; CalOH (VII), m. 140°, 1,2-H¹CalOH, V, VI, 2,4-H¹CalOH (VIII) (m. 110°), 2,4,6-H¹CalOH (IX), 2,4-H¹Me¹CalOH (m. 235°), V, VII, 2,4,6-H¹Me¹CalOH (m. 163-4°), III, 2,4,6-Me¹CalOH (m. 224-225°) (decamp.), V, 2,4,6-Me¹CalOH (m. 160°), V, 4,2,0-Me¹CalOH (m. 206°), 5°, 2,4,6-Me¹CalOH (m. 160°), 12,0-Me¹CalOH (m. 206°), H¹CalOH, m. 100-5°; 12,0-Me¹CalOH, m. 202°, 1,2,3-H¹Me¹CalOH, m. 100-5°; 1,2,4-H¹Me¹CalOH, m. 95°; 2,4,6-H¹Me¹CalOH gives 1,2,4-H¹Me¹CalOH, and HCHO, 1,2,4-H¹Me¹CalOH, 2,4-Me¹CalOH, and HCHO, with a few drops conc. HCl give 1,2,4,5-H¹Me¹CalOH-NH₂Cl (VIII), m. 182°, the free base of VIII gives a deep red color upon coupling with III. An alk. soln. of p-HOCH₂CH(OH)CH₂NH₂ coupled with III gives a deep red color; p-(p-O)₂NCH₂N₂CalOH, m. 214°, and 2,4,6-(p-O)₂NCH₂N₂CalOH, m. 275°, were isolated from the reaction. VII. Mechanism for the action of phenolic purgatives. E. Ziegler, G. Ziegner, and F. Zeiler, *Scientia Pharm.* 17, 37-42 (1949).—Bis-*p*-hydroxyphenyl ethers methanes are cleaved by diazonium salts, their di-*m*-ethers do not react, and the mono-*m*-ethers of some couple in the normal manner. There is a correlation between tendency to be cleaved and purgative activity in this series. From 3,3-bis-*p*-hydroxyphenyl-2-naphtholone is obtained 44%

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$\text{O}_2\text{NC}_6\text{H}_4\text{N}_3\text{C}_6\text{H}_4\text{OH}$, m. $213-14^\circ$, or $2,4\text{-}(\text{p-O}_2\text{NC}_6\text{H}_4\text{N}_3\text{C}_6\text{H}_4\text{OH})_2$ (I), m. 278° . $[\text{3,5,4-Me}_2\text{H}_2\text{N}_3\text{C}_6\text{H}_4\text{CH}_3]$ yields $2,6,4\text{-Me}_3(\text{p-O}_2\text{NC}_6\text{H}_4\text{N}_3\text{C}_6\text{H}_4\text{NH}_2)$, m. $175-5^\circ$. The compd. described by Braun (C.A. 23, 4087) is presumably 1,3-bis(*p*-hydroxyphenyl)-1,3-dimethylcyclobutane since it cleaves, forming I. The compd., which Meyer, *et al.* (C.A. 8, 2878), obtained from $[\text{2,4-(O}_2\text{N)}_2\text{C}_6\text{H}_3\text{N}_3\text{S}_2]$, m. $310-17^\circ$ and analyzes for $\text{C}_{14}\text{H}_{10}\text{O}_4\text{N}_6$. The following compds. are also reported: $4,2,6\text{-Me}_3(\text{p-MeOC}_6\text{H}_4\text{CH}_2)_3\text{C}_6\text{H}_4\text{ONa}$, decmp. $290-300^\circ$, from *p*-cresol, *p*-MeOC₆H₄CH₂Cl, and Na in C₆H₆. Di-Me ether, m. $81.5-82^\circ$, and mono-Me ether, m. $87-8^\circ$, of $[\text{3,5,4-Me}_2(\text{HO})\text{C}_6\text{H}_3\text{CH}_2]$, $4\text{-}(\text{p-MeOC}_6\text{H}_4\text{CH}_2)_2\text{C}_6\text{H}_4\text{OH}$, m. $83-4^\circ$; *p*-NO₂C₆H₄N₃ deriv., m. $149-50^\circ$. 4-Methoxy-2'-hydroxy-3'-(*p*-nitrophenylazo)-5'-methyl-diphenylmethane, m. 169.5° . VIII. *p*-Cresolphthalein. R. Ziegler and G. Ziegner, *ibid.* 113-17. $\text{p-MeC}_6\text{H}_4\text{N}_3\text{Cl}$ and *p*-cresolphthalein (I) in 10% NaOH form $2\text{-}[\text{3,5-Me}_2\text{HOOC}_6\text{H}_3\text{CO}_2\text{C}_6\text{H}_4\text{CO}_2\text{H}]$ (II), m. 223° , $6,2,4\text{-Me}_3(\text{p-MeC}_6\text{H}_4\text{N}_3\text{C}_6\text{H}_4\text{OH})$ (III), m. 165° (acetate, m. 147°), and mono-*p*-tolylazo-*p*-cresolphthalein (IV), m. 273° . $\text{p-O}_2\text{NC}_6\text{H}_4\text{N}_3\text{Cl}$ (V) (2.6 mols.) and I in 3% NaOH form only the analog of IV, m. 237° . In 10% NaOH, 4 mols. of V cleave I completely to II and the analog of III, m. $265-7^\circ$.

John Howe Scott

cleavages with diazonium compounds. IX, Phenol-sulfur compounds. H. Ziegler, O. Ziegner, R. Wiesnerberger, and A. Kalincher (Univ. Graz). *Monatsh.* 83, 238-44 (1951); cf. C.A. 45, 6170c. Compds. of the type $(p\text{-HOC}_6\text{H}_4)_2\text{C}_6\text{H}_4$, $(p\text{-HOC}_6\text{H}_4)_2\text{CHOH}$ (I), and $p\text{-HOC}_6\text{H}_4\text{CH(OH)Ph}$ are cleaved by diazonium salts in alk. soln.; $p\text{-HOC}_6\text{H}_4\text{CH}_2\text{Ph}$ and $(p\text{-HOC}_6\text{H}_4)_2\text{CO}$ (II) are not. Compds. of the type $(p\text{-HOC}_6\text{H}_4)_2\text{S}$ resemble I in being cleaved by $(p\text{-O}_2\text{NC}_6\text{H}_4)_2\text{SO}_2$ (III), but the related sulfones and sulfoxides can not differ as much from II as is often assumed because, like II, they can not be cleaved. $s\text{-MeC}_6\text{H}_4\text{OH}$ and SOCl_2 form $[3,4\text{-Me}(\text{HO})\text{C}_6\text{H}_3]\text{SOCl}_2$, decomp. 231° , which also can not be cleaved. $(p\text{-HOC}_6\text{H}_4)_2\text{S}$ and III give 2,4- $(p\text{-O}_2\text{NC}_6\text{H}_4)_2\text{C}_6\text{H}_4\text{OH}$, m. 278° . $[3,4\text{-Me}(\text{HO})\text{C}_6\text{H}_3]\text{S}$ (IV) and III form $6,2,4\text{-Me}(\text{p-O}_2\text{NC}_6\text{H}_4)_2\text{C}_6\text{H}_4\text{OH}$, m. 261.6° . Oxidation of IV with 30% H_2O_2 in HOAc forms the sulfoxide, m. 177.5° . In an attempt to prep. a hydroxybenzyl mercaptan, 3,4,5,2- $\text{BrMe}(\text{HO})\text{C}_6\text{H}_3\text{CH}_2\text{Br}$ was treated with KSCN in Me_2CO , forming the ethyl xanthogenate (V), m. 87.5° . Hydrolysis of V with aq. NaOH formed $[3,4,5,2\text{-BrMe}(\text{HO})\text{C}_6\text{H}_3]\text{S}$ (VI), m. 94.5° . Similarly 3,2,5,4- $\text{BrMe}(\text{HO})\text{C}_6\text{H}_3\text{CH}_2\text{Br}$ (VII) formed the p -analogs of V and VI (VIII), m. 80° and 154° , resp. VII and NaSH in aq. Me_2CO formed VIII. 5,2,3- $\text{Me}(\text{HO})\text{(PhN}_2)_2\text{C}_6\text{H}_3\text{CH}_2\text{Cl}$ (IX) likewise gave the analogs of V and VI, m. 86° and 175° , resp. However IX differs from VII in forming with NaSH the benzyl mercaptan, m. 164° . 2,6,4- $(\text{ClCH}_2)_2\text{MeC}_6\text{H}_2\text{OH}$ treated similarly formed the 2,5- $(\text{EtOCS})_2$ compd., m. 87.5° , which on hydrolysis formed 3,2,5- $\text{HSCH}_2(\text{HO})\text{MeC}_6\text{H}_3\text{CH}_2[\text{SCH}_2(\text{HO})\text{MeC}_6\text{H}_3\text{CH}_2]\text{SCH}_2\text{CH}_2\text{Me}(\text{OH})\text{CH}_2\text{SH}$ -3,2,3, m. 157° . These thioethers are cleaved by diazonium salts. Structure of

phenolphthalein in alkaline medium. M. Ziegler, H. Toppler, and M. Sobotka. *Scientia Pharm.* 19, 31-32 (1951).— PhN_2Cl (X) and phenolphthalein (XI) (3 mols.:1) do not react in a conc. contg. 10 mols. of NaOH. In one contg. 12 mols. they form 10% $p\text{-PhN}_2\text{C}_6\text{H}_4\text{OH}$ (XII), m. 152° , 6% 2- $(p\text{-HOC}_6\text{H}_4\text{CO})\text{C}_6\text{H}_4\text{CO}_2\text{H}$ (XIII), m. $310\text{-}12^\circ$,

and 25% $s\text{-C}_6\text{H}_4\text{CO}_2\text{C}(\text{C}_6\text{H}_4\text{OH})\text{N}_2\text{Ph-4,3}$, (XIV); in one contg. 8 mols., 17% XII, 17% XIII, and 45% XIV; in one contg. 3 or 4 mols., 90-100% XIV; in one contg. 2 mols. if carefully buffered, 70% 2,4- $(\text{PhN}_2)_2\text{C}_6\text{H}_3\text{OH}$, m. $133\text{-}3^\circ$. XIV, m. $242\text{-}3^\circ$, was shown to be the sym. compd. by reaction with H_2NOH in KOH soln., forming the 2-hydroxyindolinone (XV), m. $184\text{-}5^\circ$, and cleavage with aq. H_2SO_4 to 4,3- $\text{HO}(\text{PhN}_2)_2\text{C}_6\text{H}_3\text{NH}_2$, H_2SO_4 , m. 178° (free base XVI), m. $135\text{-}6^\circ$, and 2-(4,3- $\text{HO}(\text{PhN}_2)_2\text{C}_6\text{H}_3\text{CO})\text{C}_6\text{H}_4\text{CO}_2\text{H}$ (XVII), m. 183° . Similar treatment of dinitrophenolphthalein showed that it also is sym. The analogs of XV, XVI, and XVII m. $209.5\text{-}7^\circ$, 129° , and 130° (Et ester, m. $111\text{-}13^\circ$), resp. Use of a 1:1 ratio of X and XI did not form a monosubstituted XI similar to XIV. These results are interpreted as meaning that the colored form of XI can not have a permanently fixed quinonoid ring in its formula. Z. favors the usual resonance formulation involving both rings as partially quinonoid and an intermediate carbonium ion. The two colorless forms present in dil. and concd. alkali are of type I or closely resemble it and so undergo cleavage. For them the customary lactone and triphenylcarbinol structures are adopted. The failure of X and XI to react in very concd. alkali is not clearly understood since III is able to react under these conditions and PhOH and X couple under these conditions also. J. H. Scott

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Cleavage with the help of diazonium compounds. IV. Hydrazobenzophenones. O. Ziegner and H. Ziegler (Univ., Graz, Austria). *Monatsh.* 80, 350-353 (1949); *Chem. Abstr.* 43, 138, 350-63 (1949); cf. C.A. 44, 1464a. — Like *o*-(p -HO C_6H_4 CO) C_6H_4 CO C_6H_4 , *p*-HO C_6H_4 CO C_6H_4 fails to couple with diazonium compds. (p -O $_2$ NC $_6H_4$ N $_2$ Cl (I), 2,4-(O $_2$ N) C_6H_3 N $_2$ Cl). (p -HO C_6H_4) $_2$ CO (II) is likewise inert. *p*-HO C_6H_4 CH(OH)Ph in NaOH with I is cleaved into 4-hydroxy-6'-nitrosobenzene, m. 213° (from PhMe or PhNO $_2$), and BzH (2,4-dinitrophenylhydrazones, m. 235°). *p*-Benzylphenol with I gives 2-(*p*-nitrophenylazo)-4-benzylphenol, Cu-colored crystals from AcOH, m. 172-3°. The azime of II, m. 206-7° (decompn.) [cf. Spiegler, *Monatsh.* 5, 109 (1884)], on coupling with *p*-NO $_2$ C $_6H_4$ NH $_2$ (?; no doubt misprint for I) gives a dark brown, cryst. compd., m. 244-6° (no analysis given), assumed to be a diazoxime (C.A. 1, 2250°). (*o*-HO C_6H_4) $_2$ CO with I couples normally to 2,2'-dihydroxy-5,5'-bis(*p*-nitrophenylazo)benzophenone, orange needles from PhNO $_2$, m. 260°. 4,5,2-Me $_3$ (HO C_6H_4) $_2$ CH $_2$ OH, m-O $_2$ NC $_6H_4$ SO $_3$ Na, and 10% aq. NaOH, boiled for 1 hr., give 4,5,2-Me $_3$ (HO C_6H_4) $_2$ CHO, m. 70° (cf. Gattermann, C.A. 2, 820), which does not react with I. 5,2,3-Me $_3$ (HO C_6H_4) $_2$ CHO [2,4-dinitrophenylhydrazones, m. 210-40° (decompn.)] is likewise inert to I. V. *o*-Cresolphthalein. H. Ziegler and O. Ziegner. *Monatsh.* 80, 313-14 (1949). — The reaction of *o*-cresolphthalein (I) in alk. soln. with *p*-MeC $_6H_4$ N $_2$ Cl has been formulated by Leandri (C.A. 42, 6346) as giving a mono- and a bis(*p*-tolylazo) deriv. of I, m. 273° and 166°, resp. In contrast, phenolphthalein has been found by Z. and Z. (C.A. 44, 1464a) to be cleaved with diazonium compds. into azophenols and 2-(*p*-HO C_6H_4 CO) C_6H_4 CO $_2$ H (II). It has now been found that I too is cleaved to the extent of 25% into II, and that L.'s compd., m. 166°, is 4,6(or 3,5)-bis(*p*-tolylazo)-*o*-cresol (acetate, m. 147°). No exptl. details are given. U. Weiss

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2,5-Dimercapto-1,3,4-thiadiazole. R. Ziegler and N. Kreisel (Univ. Graz, Austria). *Monatsh.* 81, 818 (1950).—The possibility that 2,5-dimercapto-1,3,4-thiadiazole (I) might form a resin with HCHO was investigated. I (3 g.) [Ber. 27, 2818 (1894)] in 10 cc. 10% NaOH treated with 3.6 g. of 37% HCHO, the mixt. warmed 2 hrs. at 50°, and acidified gives 90% 2,5-bis(hydroxymethylmercapto)-1,3,4-thiadiazole (II), needles, m. 122° (from PhCl or H₂O), which by the Schotten-Baumen method is converted to I dibenzoate, m. 185°, and HCHO. II (1 g.) boiled with 3 cc. PhNH₂ forms 2-mercapto-5-(p-aminobenzylmercapto)-1,3,4-thiadiazole (III), m. 226°; benzoylation of III gives I dibenzoate. Diazotized III couples with PhOH and 2-HOC₆H₅ to deep red dyes. II shows no signs of resinifying.

David Todd

CA

Products of the condensation of 3,4-dimethylphenol with formaldehyde. G. Ziegner, E. Ziegler, W. Schaefer, and E. W. Wenzelberger, *Monatsh. Chem. Phys.*, 81, 230 (1950); *Ch. C.*, 44, 1404; 2,3,4,5-tetramethylidiphenylmethane (II) (1 g.) and 2,3,4-trimethylidiphenylmethane (III) (1 g.), heated 4 hrs. on a water bath, the residue brown, cryst. mass extd. with petr. ether, and the residue recrystd. from dil. EtOH, gave 2,2'-dihydroxy-3,3'-dibromo-4,5,5'-tetramethylidiphenylmethane (II); waxy prisms, m. 165°; mixed m. p. with 2,2'-dihydroxy-3,3'-dibromo-4,5,5'-tetramethylidiphenylmethane (III), 122°; mixed m. p. with 2,6-bis(2-hydroxy-3-bromo-4,5-dimethylbenzyl)-3,4-dimethylphenol (IV), 138°. 1 (1.8 g.) and 1.6 g. 3,4-Me₂Cal₂OH in 25 ml. EtOH, heated 50 min. on the water bath with 15 ml. 30% H₂SO₄, the soln. evaporated, the residue recrystd. from dil. EtOH, gave 2,2'-dihydroxy-3-bromo-4,5,5'-tetramethylidiphenylmethane (V), m. 167° (decompn.). To 0.72 g. V in 25 ml. CCl₄, an equiv. amt. of Br in 10 ml. CCl₄ was added dropwise while heating on a water bath, the orange-yellow product treated with boneblack, filtered, evaporated, and the residue recrystd. from methylcyclohexane or aq. EtOH to give III, m. 143°. Bromination in the same manner of 2,2'-dihydroxy-3,3'-tetramethylidiphenylmethane also gave III, m. 143°. Bromination of 2,6-bis(2-hydroxy-4,5-dimethylbenzyl)-3,4-dimethylphenol gave IV, m. 164°. Treatment of 2,2'-dihydroxy-3,3'-dihydroxymethyl-4,5,5'-tetramethylidiphenylmethane with HBr in CCl₄ gave 2,2'-dihydroxy-3,3'-bis(bromomethyl)-4,5,5'-tetramethylidiphenylmethane (VI), m. 170° (decompn.) (from Cal₂). VI in Et₂O, aq. HCl, reduced with Zn dust, the Et₂O soln. washed with water, neutralized with NaHCO₃, dried with CaCl₂, the Et₂O evaporated, and the oil recrystd. from methylcyclohexane or aq. EtOH, gave 2,2'-dihydroxy-3,3',4,5,5'-pentamethylidiphenylmethane, colorless needles, m. 140°.

J. P. Dunphy

3

CA

An electron-transfer effect in 4,4'-dihydroxybenzophenone. R. Schauenstein, R. Ziegler, and W. Bernitt (Univ. Graz, Austria). *Mona/Ch.* 83, 85-9 (1982); cf. C.A. 44, 1463j, 1959p, 1960d, 1961h. The ultraviolet absorption spectra are given of PhAc (I), PhC(OH)COPh (II), PhC(OH)COPh (III), PhC(OH)COPh (IV), PhC(OH)COPh (V) in EtOH-HCl of pH 2(a); and V in EtOH-NaOH of pH 13 (b). For all the compounds, the CO max. is at about 300 nm. It disappears on conversion to the oximes. I, II, III, and IV have an intense max. at 2500 Å. and a more intense max. at about 4000 Å. characteristic of the aromatic ring. The OH in Va effect the merging of the CO max. and the longer-wave of the 2 aromatic max. into a single band of rather great width and intensity at 2500 Å. (a max. at about 4000 Å. is absent). The effect of pH on the dissociation of the phenolic OH groups is shown by the curves for Va and Vb. The phenolate ion in Vb has an inflection in the

3400-Å. region; Vb also has the 2nd aromatic max. at 4000 Å. The p-OH groups induce conjugation between CO and an aromatic ring through intramolecular π -electron transfers resulting in a resonating system. Herman Skolnik

HUNGARIAN TECHNICAL ABSTRACTS
1958, Vol 10, Nr 2

611 K. Hlad, K. Zivner 29
D. c. and ~~the~~ Electromotors -- Egyen- és váltakozó-
- áramú elektromotorok.
Budapest, 1957, Társasági Kiadó, 445 p., Ft 40.—

3

DORIN, Pavel, allamdijs, a muszaki tudomanyok doktora, egyetemi tanar;
ZIEGLER, Karoly, gepeszmernok [translator]

New methods for determination of the characteristics of
reaction turbines. Hidrologiai kozlony 38 no.2:102-109 Ap'58.

1. Bukaresti Muegyetem (for Dorin). 2. Vizugyi Tervezo Iroda
(for Ziegler).

ZIEGLER, Karoly, dr.

"A new pumping installation for increasing the value of
reserve energies" by M. Wenger. Reviewed by Karoly Ziegler.
Energia es atom 16 no.10/11:468 01'63.

1. Vizugyi Tervezo Iroda.

ZIEGLER, K.

Alkali metals; achievements and prospective possibilities in
industrial chemistry. Tehnika Jug 18 no.10:Supplement: Hem-
industrija 17 no.10:1929 0'63.

ILLEI, Vilmos; KOVATS, D. Geza; MATRAI, Istvan; ZIEGLER, Karoly;
RASONYI, Gyozo;

Efficiency of production and utilization of water power.
Energia es atom 14 no.4/5:190-195 My '61.

1. Vizugyi Tervezo Iroda. 2. "Energia es Atomtechnika"
szerkeszto bizottsagi tagja (for Illei).

ZIEGLER, Karoly, dr., okleveles gépészmérnök, a muszáki tudományok
kandidátusa

Loss reduction at pumping stations by means of back-pressure
closing devices with forced opening. Vizügyi közl no.3:460-
463 '62.

1. Vizügyi Tervező Iroda gépészeti osztályának vezetője.

PAPP, Ferenc, dr.; BOZSONY, Dones; PICHLER, Janos; ZIEGLER, Karoly;
ERODY, Bela; DEGEN, Imre; HETENYI, Endre; NEMETH, Endre, dr.h.c.,
a muszaki tudomanyok doktora, muegyetemi tanar.

An account of the annual meeting of the Hungarian Hydrological
Society arranged on February 24, 1961. Hidrologiai kozlony 41
no.4: 356-360 Ag'61

1. Magyar Hidrologiai Tarsasag alnoke; "Hidrologiai Kozlony"
szerkeszto bizottsagi elnoke (for Papp).
2. Magyar Hidrologiai
Tarsasag fotitkara; "Hidrologiai Kozlony" szerkeszto bizottsagi
tagja (for Bozsony).
3. Orszagos Mezogazdasagi Minosegvizsgalo
Intezet (for Erody).
4. Orszagos vizugyi foigazgato (for Degen).
5. Magyar Tudomanyos Akademia Vizgazdalkodasi es Hidrologiai
Foosztalya; Epitoipari es Kozlekedesi Muszaki Egyetem I.Vize-
pitestani Tanszeke, Budapest (for Nemeth).

ZIEGLER, Karoly

"Water power plants" by Dr. Emil Mosonyi. Reviewed by Karoly Ziegler.
Energia es atom 13 no.1/2:65 Ja-F '60.

ZIEGLER, Karoly, okleveles mernok

International water resources management and Hungary's agreements
on water right. Vizugyi kozl no.4:411-419 '61.

1. Nyugalmazott orszagos vizugyi foigazgatohelyettes.

CSAJAGHY, Gabor; BOZSONY, Denes; PICHLER, Janos; KASSAI, Ferenc;
GYORGY, Istvan; SZABO, Pal Zoltan; DEVENY, Istvar (Szeged);
KIRALY, Lajos (Miskolc); ZIEGLER, Karoly; PAPP, Szilard;
SCHMIDT, Eligius Robert; GALLI, Laszlo; VAJDA, Jozsef;
RONAI, Andras; ILLES, Gyorgu; OLLOS, Geza; FINALY, Lajos;
MOSONYI, Emil; PAPP, Ferenc

Minutes of the December 19, 1958 general meeting arranged by
the Hungarian Hydrological Society, Hidrologiai kozlony 39
no.5:394 401-404 0 '59.

1. "Hidrologiai Kozlony" szerkeszto bizottsagi tagja (for
Csaajaghy, Gyorgy, Szilard Papp, Ferenc Papp, Schmidt and
Galli). 2. Orszagos Vizugyi Fozgazgatóság (for Ziegler).

ZIEGLER, K., Jr.

Automatization of hydraulic machinery and hydraulic devices. p. 406.
GEP, Budapest, Vol. 6, no. 8/9, Aug./Sept. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

MADAS, Andras, dr.; STELCZER, Karely; OROSZLANY, Istvan, dr., tanszékvezető
docens; MATRAI, Istvan, főmérnök; MANTUANO, József; KARASZI, Kálmán;
ZIEGLER, Karely; BARNA, Aladar

Remarks about the lecture by Dr. Ede Kertai entitled "Water resources
development in Hungary." Hidrológiai közlöny 43 no.2:95-98 Ap '63.

1. Országos Természeti Mezőgazdasági Főosztályának vezetője (for Madas).
2. Vízgazdálkodási Tudományos Kutató Intézet igazgatója (for Stelczer).
3. Gödöllői Agrártudományi Egyetem; "Hidrológiai Közöny" szerkesztő bizottsági tagja (for Oroszlány).
4. Vízügyi Tervező Vállalat (for Matrai).
5. Melyépítési Tervező Vállalat osztályvezetője (for Mantuano).
6. Középdunántúli Vízügyi Igazgatóság igazgatója (for Karaszi).
7. "Hidrológiai Közöny" szerkesztő bizottsági tagja (for Ziegler).

CZECHOSLOVAKIA

ZIEGLER, K.: Veterinary Research Institute, Department of Parasitology (Vyzkumny Ustav Veterinarniho Lekarstvi, Odd. Parasitologie), Brno - Medlanky.

"Vaccination of Chickens Against Syngamosis."

Prague, Veterinarni Medicina, Vol 11, No 9, Sep 66, pp 569-578

Abstract [Author's English summary modified]: The larvae of *Syngamus trachea* must receive an irradiation of 8000 r to destroy their ability to penetrate into the trachea and develop there. Experiments were conducted within the range of 4 to 30×10^3 r; best results were obtained with a vaccine that received an irradiation of 20000 r; this vaccine produced immunity for 30 days following vaccination. 3 Figures, 3 Tables, 3 Western, 1 Czech, 1 Russian reference. (Manuscript received 30 Dec 65).

1/1

S/282/63/000/002/005/005
A059/A126

AUTHORS: Ziegler, Ladislav, Medek, Vlastimír, Jelinek, Tomáš

TITLE: Agitator for epoxy resin compounds

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, 47. Khimicheskoye i kholodil'noye mashinostroyeniye, no. 2, 1963, 63, abstract 2.47.379 P (Czech. pat. 39 a, 19/07, no. 100806, September 15, 1961)

TEXT: An agitator is described consisting of two drums which are disposed one over the other: a vertical and a horizontal one equipped with thermostats to maintain the given temperatures. After the epoxy resin has been agitated with the filler in the stationary drum with rotating shovels, the mixture obtained is fed to the horizontal rotating drum with bevel bottoms. After a hardener has been added to the mixture, the horizontal drum is hermetically sealed and air is evacuated from its internal cavity through the channels of the driving shaft. After the required evacuation has been reached, the valve in the vacuum line is closed and the horizontal drum rotated. The components are mixed with the aid of a stationary perforated mixer and a scraper kept in the

Card 1/2

Agitator for epoxy resin compounds.

S/282/63/000/002/005/005
A059/A126

vertical position in the drum with a counterweight. The technique indicated permits to obtain a homogeneous mixture without any bubbles within a short time. There are 2 figures.

K. Onosovskiy

[Abstracter's note: Complete translation]

Card 2/2

"APPROVED FOR RELEASE: 09/19/2001

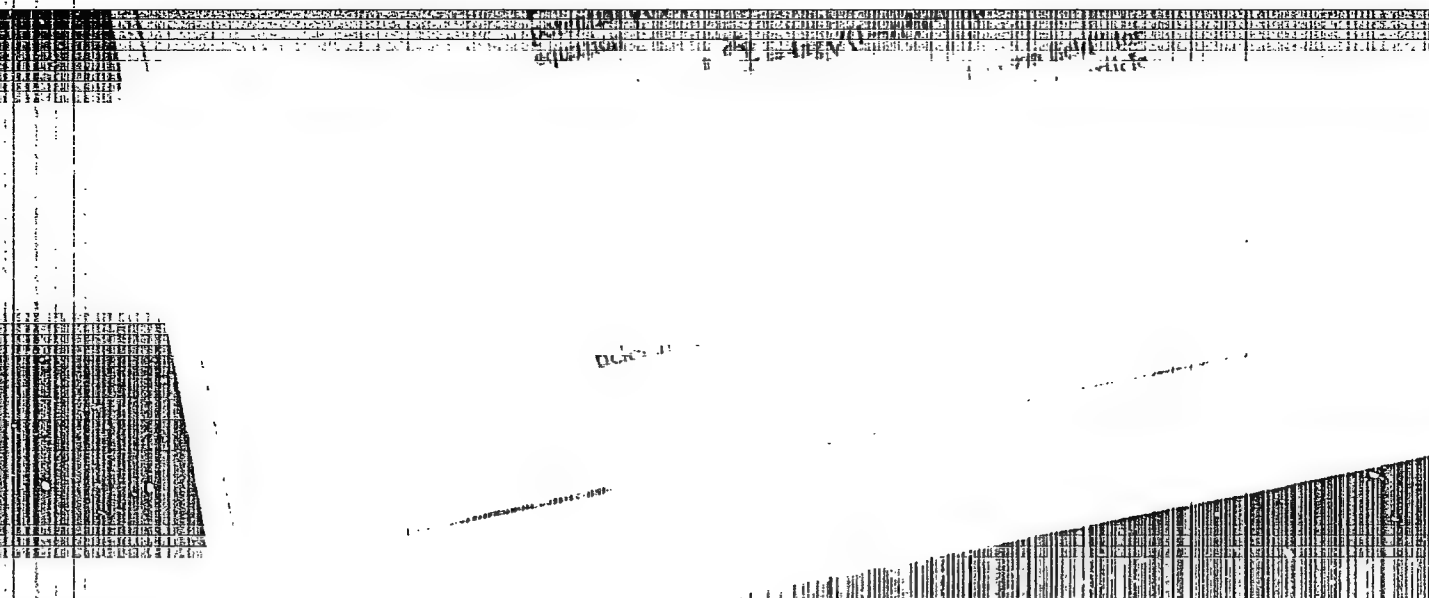
CIA-RDP86-00513R002065110010-5

APPROVED FOR RELEASE: 09/19/2001

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APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110010-5"

Ziegler, M.A.

HUNGARY/Theoretical Physics - Classical Electrodynamics. Classical Field Theory. B-3

Abs Jour : Ref Zhur - Fizika, No 4, 1958, No 7570

Author : Marx, G., Ziegler, M.A.

Inst : *R. Eotvos University** Central Research Institute of Physics; Budapest, Hungary.

Title : Relativistic Two-Body Problem in the Classical Theory of Meson Field

Orig Pub : Acta phys. Acad. sci. hung., 1957, 7, No 1, 125-133

Abstract : The authors consider the motion of two particles of equal mass, interacting with each other through a classical scalar meson field. In this examination a count is taken of the delay. The solution of the equations of motion is obtained by numerical integration. At small distances, the absolute value of the meson potential reaches the values of the rest energy of the particle mc^2 , i.e., the acceleration at this point reverses its sign and "relativistic repulsion" takes place. It is noted that analogous results were obtained in the work by Kumin and taksar, Verlet, Marx & Samossy, who have considered the motion of a single particle in a potential field of a particle at rest.

Card : 1/1

HUNGARY/Nuclear Physics

C-4

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11140

one assumes the value $r_0 = 1.2 \times 10^{-13}$ cm, corresponding to the experimental data on the scattering of electrons, it becomes necessary to assume that the volume occupied by the protons in the nucleus is less than the volume occupied by the neutrons. With this, there appears in the semi-empirical formula for the binding energy a term $a_4(A - 2Z)$, which takes into account the difference in the mean kinetic energy of the neutrons and protons, and one also obtains

$$\Delta E = -2a_4 + a_5 A^{2/3}. \quad \text{When } r_0 = 1.2 \times 10^{-13}$$

cm and the experimentally-determined value of E is used, the value obtained for a_4 is 0.64 Mev.

Card 2/3

HUNGARY/Nuclear Physics

C-4

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11140

The resultant semi-empirical formula

$$E = -15.6A + 17.1A^{2/3} + 21.2 \frac{(A-2Z)^2}{A} + 0.6(A-2Z) + 0.72Z^2A^{-1/3} + 2$$

is in agreement with the experimental data over the entire interval of variation of A.

Card 3/3

Ziegler, M.A.

3

7270 Calculation of pairing energy by means of the
eigenfunctions of the Yukawa potential. M. A.
Ziegler. *Notes in field phys. Harpur, 4, No. 3, 1980*
(1980).
If a strong spin-orbit force is used in the radial
equation, pairing energies (which depend on the radial
eigenfunctions) are obtained such that in orbits of the
same azimuthal quantum number, that of higher
angular momentum has the higher pairing energy.

G. E. HUGHES

Symbol
start

ZIEGLER, R., Dipl. Ing.

Influence of C, Si, Mn, P, and S on some properties of lamellar
graphite cast iron. Slevarenstvi 11 no.8/9:308-315 Ag '63.

1. Giesserei-Institut, Leoben Austria.

ZIEGLER, V.

ZIEGLER, V. Gyorgy Gerle's Peruhazasok gazdasagimuszaki tervezese (Economic-
Technical Planning of Investments); a book review. p. 30.

N o. 24, Dec. 1955.

MUSZAKI ELET.

TECHNOLOGY

Budapest, Hungary

So: East European Accession, Vol. 5, No. 5, May 1956

ZIGLER, V.

"The Words Pyomas, Szivas, Vakuum, Huzat", P. 142, (SZABVANYCSIGAS,
Vol. 5, No. 9, September 1953, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 4, No. 3,
March 1955, Uncl.

VIEWEG, Rainer; ZIEGLER, Vilmos [translator]

Processing hydrochloric acid waste. Magyar kem lap 18 no.2/3:
85-89 F-Mr '63.

1. VEB KIB Chemie, Leipzig (for Vieweg). 2. Vegyimveket
Tervezo Vallalat (for Ziegler).

17

A quick method for determining specific weight of silt in brick. ~~N. N. Stebnikov and V. D. Ziegler. *Oreoslovo* 1964, No. 8, 20-2 (1964).~~—A new method based on the hydraulic law of loss of wt. of bodies immersed in a liquid; a specially adapted Moore-Worthington balance and xylene are used. The operation takes 15-20 min. E. H. S.

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

JANOSSY, Lajos; ZIEGLER-NARAY, Maria

The hydromechanical model of wave mechanics. Pt. 2. Acta phys
Hung 16 no. 4:345-353 '64.

1. Central Research Institute of Physics, Budapest. 2. Editorial
board member, "Acta Physica Academiae Scientiarum Hungaricae" (for
Janossy).

FEDELESOVA, M.; ZIEGLHOFFER, A.

Study of changes in adenosine triphosphoric -, adenosine di-phosphoric- and adenosine monophosphoric acids in the blood during restricted blood circulation. Bratisl. lek. listy 2 no.11:648-654 '63.

1. Oddelenie experimentalnej chirurgie Ustavu experimentalnej mediciny SAV; vedouci: akademik K.Siska.

*

ZIEL.

Summer camps. p. 3.

Vol 6, no. 14, June 1953. ROLNIK SPOLDZIELCA. Warsaw, Poland

Vol 8, no. 35, Aug. 1955

So: Eastern European Accession. Vol 5, no. 4, April 1956

14

Technical and sanitary arrangements for the mining of radium in Jachymov.
 H. Ziml. Trans. 1st Intern. Congr. Sanit. Tech. and Communal Hyg., Prague; U.S. Public
 Health Eng. Abstracts 10, 1112, 4 (Aug. 30, 1930).—In the extn. of U ore a special geo-
 logical stratification is concerned requiring hauling of substances contg. many ingredients
 differing from both a phys. and a chem. point of view. The radioactivity of the rocks and
 the content of emanation in the atm. are important public health factors. Data ac-
 cumulated over a period of years show that the incidence of pulmonary cancer is much
 greater among the miners than in other groups. Rtn. of dust and use of reliable re-
 spirators are recommended.
 C. R. FULLER

ASSOCIATE DETAILORUM LITERATURE CLASSIFICATION

JAWORSKI, Marian; ZIELASKO, Antoni; GASIOR, Krystyna

Colorometric determination of ethylene oxide. Chem anal
6 no.6:1005-1012 '61.

1. Institute of Organic Synthesis, Blachownia Slaska.

ZIELASKOWSKI.

"People's councils mobilize peasants for Road Deeds!" p. 10, (DROGWICTWO
Vol. 10, No. 1, Jan. 1955. Warszawa, Poland)

SO: Monthly List of East European Accessions. (REAL). LC. Vol. 4, No. 4.
April 1955. Uncl.

L 54188-65

INT(m)

TOP(s)

ABSTRACT: The quality factor of radiation may be estimated experimentally by using

the ratio of the number of ions produced in the detector to the number of ions produced in the

SUBMITTED: 30Apr65

ENCL: 00

SUB CODE: NP

L 33011-66

ACC NR: AP6024170

SOURCE CODE: PO/0046/65/G10/012/0791/0806

AUTHOR: Czerniewski, Michal--Chernovski, M.; Panta, Przemyslaw--Pan'ta, P.;
Zielczynski, Mieczyslaw--Zel'chin'ski, M.; Zak, Wladlaw--Zhak, V.; Zarnowiecld,
Krzysztof--Zharnovetski, K. 41
B

ORG: Reactor Exploitation Department, Institute of Nuclear Research, Warsaw; Health
Physics Department, Institute of Nuclear Research, Warsaw

TITLE: Bone tissue sterilization¹⁹ using reactor fuel gamma radiation

SOURCE: Nukleonika, v. 10, no. 12, 1965, 791-806

TOPIC TAGS: bone, nuclear fuel, gamma radiation, radiation biologic effect,
radiotherapy

ABSTRACT: An absolute ionization method of measurements of doses absorbed in bone
tissue, and additional methods were developed. Measurements of spatial dose distri-
bution in grafts were performed. From the detailed analysis it follows that each
point of the graft absorbs in sterilization a dose of 3.3 Krad, with an accuracy of
20%. In the two years of its application the sterilization method developed has
proved satisfactory. This was evidenced in sterilization of more than one hundred
lyophilized human bone grafts successfully used for therapeutical purposes. The
authors thank Professor K. Ostrowski for his suggestion to use the facilities of the
EWA ~~APPROVED FOR RELEASE 09/19/2001~~ ~~CIA-RDP86-00513R002065110010-5~~
and also for his valuable comments. The
authors also thank Mr. J. Aleksandrowicz for over-all assistance in the project, Docent
Z. Zagorski for discussion on the subject of chemical dosimeters and Mr. T. Berens for
designing the containers, and general help. Orig. art. has: 12 figures and 14 formulas.
Orig art. in Eng. / NA /
Orig CODE: 06 18- / SUBM DATE: 14Oct65 / ORIG REF: 003 / SOV REF: 001 / OTH REF: 027
Cora 1/1 ¹²

2913 1766

39030

P/046/62/007/003/004/008
D256/D308

27.2400

AUTHOR:

Zielczyński, Mieczysław

TITLE:

Use of columnar ion recombination for determining the relative biological effectiveness of radiation

PERIODICAL:

Nukleonika, v. 7, no. 3, 1962, 175-182

TEXT:

A method of specific ionization measurements is proposed using a tissue-equivalent chamber with maintained conditions of columnar ion recombination; the specific ionization can then be measured directly in terms of the number of ions that recombine in the chamber. It is shown that if the conditions of recombination in the chamber are maintained in such a way that the efficiency of the ion collection is a linear function of the relative biological effectiveness (RBE), then the determined mean value of the specific ionization will correspond to the RBE of the radiation, independently of the composition and the character of the radiation. The method is suitable for RBE measurements and monitoring of compound radiations of an unknown composition, e.g. in conjunction with operation

Card 1/2

39030

P/046/62/007/003/004/008
D256/D308

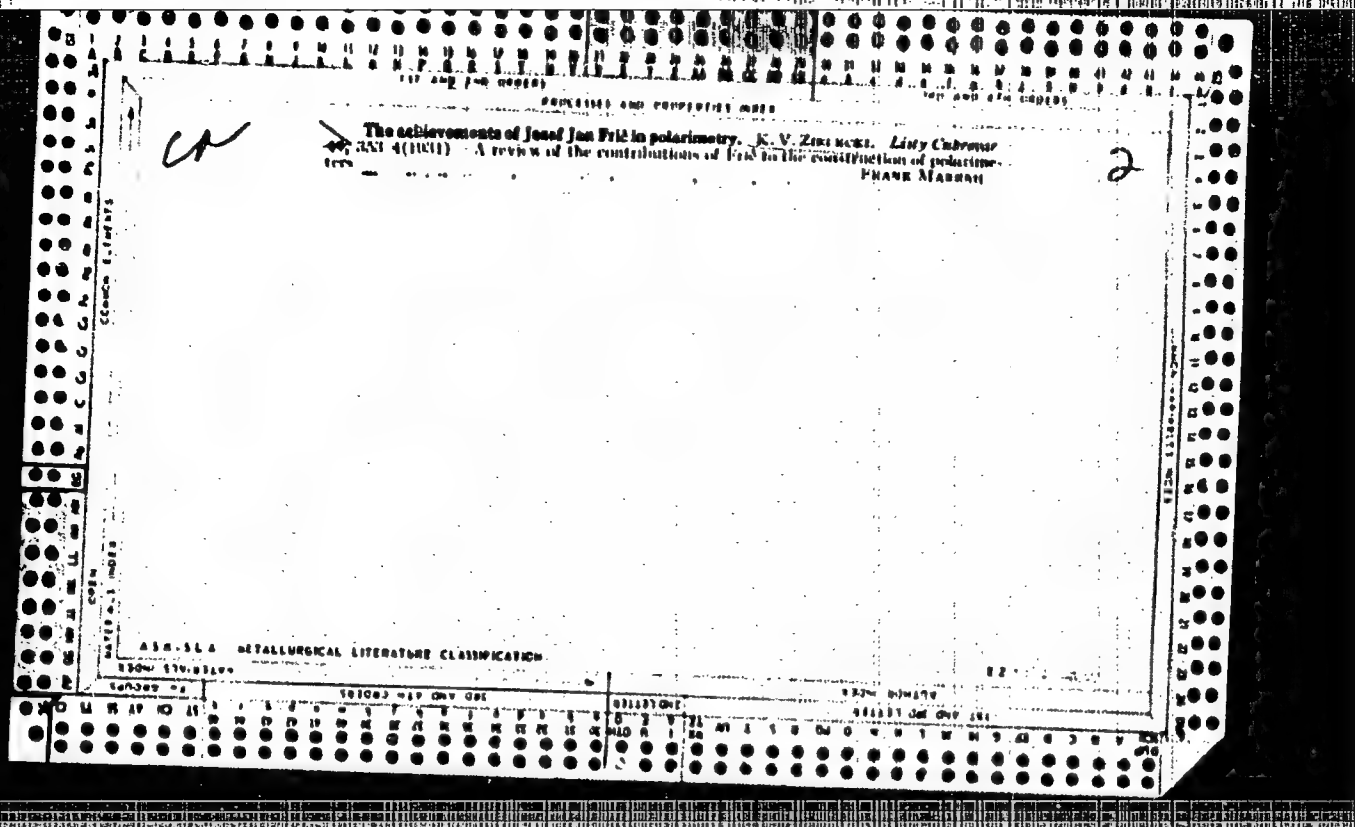
Use of columnar ion ...

of particle accelerators. There are 3 figures. The most important English-language reference reads as follows: H.H. Rossi, Rad. Res., 10, no. 5, 522 (1959).

ASSOCIATION:

Ob'yedinennyy institut yadernykh issledovaniy
Moskva (Joint Institute of Nuclear Research,
Moscow)

Card 2/2



Distry 4E3d

Mean specific heats of some ternary azeotropes. W. Świętosławski and A. Zielenkiewicz (Inst. Chem. Pol. P.A.N., Warsaw). *Bull. Acad. Polon. Sci., Ser. Sci., Chim. 1958, 6, 385-8* (1958) (in English); cf. following abstract. Mean specific heats for the temp. ranges between room temp. and the respective b.ps. were detd. for liquid mixts. of const. compn. equal to that of the azeotrope at atm. pressure. Weighed samples were transferred from a Świętosławski ebullimeter used as a thermostat to an isothermal calorimeter, water being used as a standard. The temp. ranges and specific heats for indicated compds. or azeotropes were: pyridine (I)-AcOH-heptane (II) azeotrope, 96.3-21.6°, 0.689; I, 96.3-21.7°, 0.444; AcOH, 96.3-22.0°, 0.556; II, 96.3-21.8°, 0.590; I-AcOH-nonane (III) azeotrope, 129.0-22.1°, 0.502; I, 129.0-22.1°, 0.462; AcOH, 129.0-22.4°, 0.547; III, 129.0-22.1°, 0.000 cal./° degree, resp.

I. Steck

Country : Poland
 Category : Physical Chemistry - Thermodynamics. Thermochemistry.
 Equilibria. Physicochemical analysis. Phase Transitions.
 Abs. Jour : RZhKhim., No 13, 1959 45053
 Author : Swietoslowski, W. and Zielenkiewicz, A.
 Institut. : Not given
 Title : Heats of Evaporation in Homologous Series of Bi-
 nary Azeotropes
 Orig. Pub. : Rozniki Chem, 32, No 4, 913-922 (1958)
 Abstract : The authors have measured the heat of evaporation
 of binary positive azeotropes (A_1H_1) formed by:
 (1) aromatic hydrocarbons (benzene, toluene, p-
 xylene), acting as the azeotropic agent A_1 , and
 homologous series of primary aliphatic alcohols
 (H_1) (methyl, ethyl, n-propyl, isopropyl, isobutyl,
 n-butyl, isobutyl, and n-hexyl alcohols) and (2)
 pyridine (A_1) with hydrocarbons (H_1) (heptane, n-
 octane, and n-nonane). The measurements were made
 at the bp of the respective azeotropes, using a
 method described earlier (RZhKhim., 1958, No 16,
 55592). When the heat of evaporation of the azeo-
 tropic agent A_1 is higher than that of the series

Card: 1/2

Country	: Poland	B
Category	:	
Abs. Jour	:	45055
Author	: Swietorlawski, W. and Zielenkiewicz, A.	
Insistent.	: Not given	
Title	: Average Specific Heat Capacities of Positive Binary Azeotropes	
Orig. Pub.	: Roczniki Chem, 32, No 4, 923-928 (1958)	
Abstract	: The authors have measured the average specific heat capacities (\bar{C}_p) of the following positive binary azeotropes: toluene-isopropyl alcohol, toluene-isobutyl alcohol, p-xylene-isobutyl alcohol, p-xylene-isobutyl alcohol [sic], p-xylene-isoamyl alc and o-xylene-isoamyl alc. The measurements were made over a temperature range extending from the bp of the respective azeotropes to a temperature of about 21°. The \bar{C}_p of the pure components were also measured. It has been observed, in agreement with previously published work (R. Kremann, Die Eigenschaften der binären Flüssigkeitgemische,	

Card: 1/2

CZARNOTA, J.; BARANOWSKI, B.; ZIELENKIEWICZ, W.

Characteristics of heat exchange in a differential microcalorimeter.
Bul chim PAN 12 no.8:561-565 '64.

1. Institute of Physical Chemistry of the Polish Academy of
Sciences, Warsaw. Submitted June 11, 1964.

L 05302-67

ACC NR: AP7000225

(N)

SOURCE CODE: PO/0099/66/040/002/0323/0326

MACZYNSKI, A., ZIELENKIEWICZ, A. and ZIELENKIEWICZ, W., of the Institute of Physical Chemistry, Polish Academy of Sciences (Instytut Chemii Fizycznej Polskiej Akademii Nauk) Warsaw.

"Ebulliometric Thermostat"

Warsaw, Roczniki Chemii, Vol 40, No 2, 1966, pp 323 - 326

Abstract (Authors' English summary): A thermostat was constructed which allows to maintain the temperature constant of within $\pm 0.002^{\circ}\text{C}$ over extended periods of time. Orig. art. has: 2 figures and 2 tables. [JPRS: 36,002]

TOPIC TAGS: thermostat, laboratory instrument

SUB CODE: 13 / SUBM DATE: 20 Aug 65 / OTH REF: 003

KH

Card 1/1

POLAND/Organic Chemistry. Synthetic Organic Chemistry.

G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64359.

Author : Malinowski Stanislaw, Basinski Stanislaw, Olszewska Maria, Zieleniewska Hanna.

Inst :

Title : Investigations into Aldol Reactions in the Gaseous Phase. III.

Orig Pub: Roczn. chem., 1957, 31, No 1, 123-129.

Abstract: By passing the mixed vapors of equimolar columns of formaldehyde and propione, n-butyric or n-valeric aldehydes at temperatures of 250-325° over silica gel saturated with liquid glass consisting of Na₂O : 3.18 SiO₂ to the concentration of 7%, the corresponding alpha-methyl (I), alpha-ethyl (II) and alpha-(n propyl)-acroleins (III) are produced. The reactions are carried

Card : 1/2

4

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64359.

on as described earlier (see RZhKhim, 1958, 1204). The yields of I-III depend on temperature, volume of catalyst and the nature of the original aldehydes. Under optimum conditions (275°, 40-45 g. of aldehyde per 1 g. of catalyst per hour), yields were: 45.5% for (I), 49.2% for (II), 59% for (III). I -III are characterized as semicarbazones and 2,4 dinitrophenylhydrazones.

Card : 2/2

ZIELENIENSKI, B.

The influence of spacing on the yield of sugar beets.

p. 57. (GAZETA CUKROWNICZA.) (Warszawa, Poland) Vol. 60. No. 2, Feb. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

ZIELENIOWSKI, B.

TECHNOLOGY

Periodicals: GAZETA CUKROWNICZA. Vol. 60, no. 10, Oct 1958

ZIELENIOWSKI, B. Manuring sugar beets. p. 329.

Monthly List of East European Accessions (EEAI) IC, Vol. 8, no. 2,
February 1959, Unclass.

ZIELENIEWSKI, B.

Mikronawozy. Warszawa, Panstwowe Wydawn. Rolnicze i Leśne, 1950. 39 p. (Fertilizers containing trace elements)

DA

Not in DLC

SO: Monthly List of East European Accessions (EEAL) 18, Vol. 6, no. 7, July 1957. Uncl.

KOTARBINSKI, Tadeusz; ZIKLENIIEWSKI, Jan

Labor productivity; some theoretical remarks. Review Pol Academy 5,
no.1:1-17 Ja-Mr '60. (ERAI 10:3)
(Labor productivity)

PAWLIKOWSKI, Tadeusz; ZIELENIEMSKI, Jerzy

From studies on regeneration in the Endocrinology
Institute of the School of Medicine in Lodz. Zesz
probl nauki pol no.18:72-76 pt.2 '59.

*

POLAND/General Biology - General Histology.

B.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 94597

Author : Ber, Artur; Hochlinger, Helena; Zieleniowski, Jerzy

Inst : -

Title : Investigation of Melanophore Reaction. I. Influence of Water Extracts of Postfermentative *Penicillium Mycelium Chrysogenum* Q-176 on the (Content of) Pigment in Tadpoles *Xenopus laevis* Daudin.

Orig Pub : Endokrynol. polska, 1956, 7, 188-194.

Abstract : The development of melanophores was shown in tadpoles treated with an extract of *Penicillium*. The authors exclude the possibility of the presence of melanophore hormone in the mycelium. -- From the authors' resume.

Card 1/1

BER, Artur; ZIELENIŃSKI, Jarsy

Effect of prolonged starvation on limb regeneration in the frog.
Xenopus laevis. Pat.Polska 9 no.1:35-38 Jan-Mar '58..

1. Z Zakładu Endokrynologii A.M. w Łodzi Kierownik: prof. dr A. Ber
Adres autora: Łódź, ul. 22 Lipca 29/7.

(STARVATION, eff.

on limb regen. in frog (Pol))

(REGENERATION,

eff. of starvation on limb regen. in frog (Pol))

KOTARBINSKI, T., prof.; ZIELENIEWSKI, J. doc.dr.

Labor productivity. Przegl techn 81 no.6:5-7 F '60.

ZIELENIEWSKI, Jan, dr. (Warszawa)

Joseph Kunert's Transactions in maritime commerce; a book review.
Tech gosp morska 11 no.7/8:229-230 J1-Ag '61.

ZIEMNIEWSKI, Jerzy; MUSIALOWA, Maria

Behavior of some morphological elements of the blood during
adrenal regeneration in Sprague-Dawley rats. Endokr. Pol.
16 no.4:425-430 J1-Ag '65.

1. Katedra i Zaklad Endokrynologii AM w Lodzi (Kierownik:
prof. dr. T. Pawlikowski).

PAWLIKOWSKI, Tadeusz; prof. dr.; ZIELNIENSKI, Jerzy

Influence of ACTH and cortisol on the adrenal regeneration in
Sprague-Dawley rats. Endokr. Pol. 15 no.6:629-636 1964-65.

1. Zakład Endokrynologii Akademii Medycznej w Łodzi (Kierownik: prof. dr. T. Pawlikowski).

MIKOLAJCZYK, Henryk; ZIELENIEWSKI, Jerzy

Effect of STH, TSH, ACTH, FSH, DOCA, cortisone and high-carbohydrate and high-protein diets on the urinary excretion of acid mucopolysaccharides and 17-ketosteroids in 2 normal males. Endokr. Pol. 14 no.6:581-586 N-D '63.

1. Zakład Endokrynologii Akademii Medycznej w Łodzi (Kierownik: Prof. dr T. Pawlikowski).

EXCERPTA MEDICA Sec.3 Vol.11/8 Endocrinology Aug 57

1494. BER A. and ZIELENIEWSKI J, Zakl. Endokrynol. AM, Łódź. *Badania nad elektrotirografią. Doniesienie 2. Badania chorych z prawislową przemianą materii, Electrothyrography. 2. Investigations in patients with normal BMR. ENDOKR. POL. 1956, 7/1956 (259-262) Graphs 3
- Examining patients with a small goitre and compensated thyroid function by the method of unipolar leads from both lobes of the thyroid gland, it was observed that besides the functional currents of heart and muscles, deviations of an indeterminate origin are present, probably dependent on the thyroid function. (III, 6)

POLAND/Human and Animal Physiology (Normal and Pathological).
Internal Secretion. Thyroid Gland. T

Abs Jour: Ref Zhur-Biol., No 17, 1958, 79755.

Author : Ber, Artur; Zieleniewski, Jerzy.

Inst :

Title : Electrothyreographic Investigations. II. Investigation
of Patients with Unimpaired Metabolism of Substances.

Orig Pub: Endokrynol. polska, 1956, 7, 259-262.

Abstract: No abstract.

Card : 1/1

ZIELIŃSKI, Jerzy

A simplified method for breeding *Xenopus laevis*. *Endokr. Pol.*
15 no.2:227-228 Mr-Apr '64.

1. Zakład Endokrynologii Akademii Medycznej w Łodzi (Kierownik:
prof. dr. T. Pawlikowski).

ZIELENIEWSKI, R

POL.

131.191.02.003 021.014.3

3132
Józef A. Zieleniewski R. Technical and Economic Indices for Pro-
duction and Use of "CSW-18" Cutting Tools.
"Wskaźniki techniczne i ekonomiczne produkcji i użytkowania narzędzi
ci napawanych". Przegląd Mechaniczny. No. 8, 1953, pp. 274-276, 3 figs.
On the basis of data obtained from experiments carried out by the
Welding Institute over the production of cutting tools and -- from the
Machine Tool and Machining Institute -- of research carried out over
the performance of tipped tools, the authors have computed technical
and economic indices for the production and utilization of plain milling
cutters. These indices are an aid to comparing tipped milling cutters
are-welded by means of CSW-18 electrodes with solid SW-8 high-speed
steel milling cutters. A method is suggested for computing and clas-
sifying these indices. In summing up the details of this problem, the
authors conclude that the mastering of the tipping process, with ma-
terially contribute towards increasing the performance of tipped tools.

ZIELENIEWSKI, Ryszard, dr; KOZAKIEWICZ, Krystyna, mgr

Experiments concerning air injection in burners. Gaz woda techn
sanit 37 no.12:401-402 D '63.

1. Central Gas Engineering Laboratory, Krakow Branch.

ZIELENIOWSKI, Ryszard, mgr; KOZAKIEWICZ, Krystyna, mgr

CO content in flue gases as an indicator of incomplete combustion. Gaz woda techn sanit 37 no.8:249-250 Ag '63.

1. Central Gas Engineering Laboratory, Krakow Branch.

ZIELENEWSKI, Ryszard, dr.

Combustion rate of gas mixtures. Gaz woda techn sanit 38
no.4:129-134 Ap '64

1. Central Gas Engineering Laboratory, Krakow Branch.

CA

8

PROCESS AND PROPERTIES

The vivianites of the Polish lowlands. S. Ziekniewski, *Compt. rend. soc. sci. Varsovie, Classe III*, 31, 183-8 (1938); *Chem. Zentr.* 1939, I, 4900.—The vivianites are found as veins or pockets in peat and ore deposits. They have been formed by reactions at low temps. in an anhyd. environment under the influence of microorganisms. The cryst. vivianite (44-80%) is contaminated by plant residues, Al_2CO_3 , CaCO_3 , SiO_2 , colloidal Fe phosphates, silicates and oxides. The crystals show strong pleochroism, the optic axial angle is $73-90^\circ$, the double refraction is 0.04-0.059. Chem. investigation of a H_2SO_4 soln. of the mineral showed a content in $\text{Fe}_2(\text{PO}_4)_3$, limonite, C and water. When vivianite is heated, water is given off rapidly between 40 and 80° (up to 14% of the water). Above this temp. it is evolved slowly, the rate of evolution increasing again only at 160° . At 200° about 31% of the water has been lost, dehydration still being incomplete even at 220° . The color and phys. properties of the vivianite change as it is dehydrated. M. G. Moore

AS & SLA METALLURGICAL LITERATURE CLASSIFICATION

ZIELENKIEWICZ, A.

Enthalpy of evaporation of heteroazotropes. Bul chim PAN 12
no.7:487-490 '64.

1. Institute of Physical Chemistry of the Polish Academy of
Sciences, Warsaw. Submitted April 30, 1964.

POLAND/Atomic and Molecular Physics - High Pressure Physics.

D-

Abs Jour : Ref Zhur Fizika, No 3, 1960, 5683

of calorimeter is that to measure the thermal effect it is not necessary to know the specific heat of the investigated object. In the LFC use is made of automatic devices for measuring V accurate to $\pm 0.1\%$, and for measuring $\Delta t = t_2 - t_1$ with a maximum error of $\pm 0.001^\circ \text{C}$. The LFC is placed in a water thermostatic bath, surrounded by an air thermostatic bath. Constant temperature is maintained in the thermostatic bath, accurate to $\pm 0.001^\circ \text{C}$. The LFC makes it possible to determine the thermal effects on the order of 1 cal/hr under the condition that the rate of flow of the liquid is 500 ml/hr. The LFC is calibrated by means of an electric heater made of manganin. -- T.V. Zakharova

Card 2/2

- 45 -

APPROVED FOR RELEASE: 09/19/2001
POLAND / Physical Chemistry--Thermodynamics. Equilibrium. Physico-chemical analysis. Phase transitions.

B-8

Abs Jour : Referat Zhur--Khimiya, No: 11, 1959, 37827
Author : Swietoslawski, W.; and Zielenkiewicz, A.
Inst : Polish Academy of Sciences
Title : Mean Specific Heats of Some Ternary Azeotropes.
Orig Pub : Bull Acad Polon Sci, Ser Sci Chim, Geol et Geograph, 6, No: 6, 365-366, XXIX (1958) (in English with a Russian summary)

Abstract : The authors have determined the specific heats of the starting components and of the following two mixtures: (1) 10.6 wt% pyridine, 3.4% acetic acid, and 86.0% n-heptane, and (2) 29.3% pyridine, 20.9% acetic acid, and 49.8% n-nonane, corresponding in composition to the positive-negative

Card 1/2

POLAND / Physical Chemistry--Thermodynamics.

B-8

Thermochemistry.. Equilibrium. Physico-chemical analysis. Phase transitions.

Abs Jour : Referat Zhur--Khimiya, No. 11, 1959, 37826

o-xylene-isoamyl alcohol; the mean specific heats of the pure components were also measured. The measurements were made at 200 intervals up to the bp of the azeotrope (at P = 1 atm) with an error of $\pm 0.3\%$, using the mixing method. A description of the modified Swietoslawski ebulliometer used in the heating of the specimens investigated is given. The specific heat values calculated by the additivity rule were found to be smaller than the experimental values (the difference, in cal per gm per deg, varied within the limits of $+0.017$ to $+0.058$ for the various mixtures). The formation of binary positive azeotropes is related to an increase in the

Card 2/3

POLAND / Physical Chemistry--Thermodynamics.

B-8

Thermochemistry. Equilibrium. Physico-chemical analysis. Phase transitions.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R002065110010-5"

Abs Jour : Referat Zhur--Khimiya, No. 11, 1959, 37826

average specific heat, in agreement with earlier published observations (A. K. Zhdanov, Zhur obshchui Khim, 11, 471 (1941)). -- S. Byk

Card 3/3

ACC NR: AP6018255

$$(3) \quad H_{C_9H_{12}} = 13.25 - 8.349 \times 10^{-3} T \text{ (at } 390.7-437.4^\circ K)$$

0

These formulas enable one to calculate the enthalpy of vaporization within the indicated temperature intervals with an accuracy equal to that of the calorimetric measurement. The specific heat values used in the calculation of the enthalpy were determined experimentally with an accuracy of $\pm 0.2\%$. Orig. art. has: 4 figures, 3 tables, and 3 formulas.

SUB CODE: 07/ SUBM DATE: 03Jun65/ ORIG REF: 013/ OTH REF: 003

Card 2/2 *exp*

SWIETOSLAWSKI, W.; ZIELENKIEWICZ, A.

Evaporation enthalpies and entropies of several series of
azeotropes. Bul Ac Pol chim 6 no.2:111-114 '58. (KAI 9:6)

1. Institute of Physical Chemistry, Polish Academy of Sciences.
Presented by W. Swietoslowski.
(Azeotropes)

SWIETOSLAWSKI, W.; ZIULENSKIEWICZ, A.

Mean specific heat of some ternary azeotropes. Bul Ac Pol chim.
6 no.6:367-369 '58. (EPAI 9:6)

1. Institute of Physical Chemistry, Polish Academy of Sciences.
Presented by W. Swietoslowski.
(Azeotropes) (Specific heat)

HANA KIELENKIEWICZ

Distr: 4E2c(j)/4E3a

7

Vaporization enthalpy of a homologous series of binary azeotropes. Wojciech Swietoslawski and Anna Zielenkiewicz (Univ. Warsaw). *Roczniki Chem.* 31, 113-22 (1958) (English summary). The vaporization enthalpy of binary pos. azeotropes (A_1, H_1) composed of aromatic hydrocarbons as azeotropic agents A (benzene, toluene, p-xylene) with primary aliphatic alcs. as series of homologs (H_1) and of pyridine with α -paraffinic hydrocarbons were detd. If the vaporization enthalpy of A_1 is higher than those of H_1 , the gram-vaporization enthalpies of azeotropes increase with the normal b.p. of H_1 , whereas if that of A_1 is lower than those of H_1 , a reverse phenomenon takes place. The heat of mixing at the b.p. of the azeotrope increases with rising b.p. of the homolog. The curves of mol. vaporization entropies of the azeotropes plotted vs. their compn. show a max., the position of which depends on the vaporization entropy of A_1 . A. Kreglewski.

5
2-may
2

7.17

ANNA ZIELENKIEWICZ

Distr: 4E3d/4E2c(j)

The mean specific heats of binary positive azeotropes. Wojciech Swietoslawski and Anna Zielenkiewicz (Univ. Warsaw). *Roczniki Chem.* 34, 633-640 (1960) (English summary).—A thermostat functioning on the principle of Swietoslawski's ebulliometer was used to det. mean sp. heats of liquids in the range from room temp. to the b.p. for toluene (I) (0.433 and 0.441 cal./g. degree), *p*-xylene (II) (0.447, 0.453), *m*-xylene (III) (0.448), *o*-xylene (IV) (0.405), isopropyl alc. (V) (0.718), isobutyl alc. (VI) (0.693, 0.704), and isomyl alc. (VII) (0.699), and of the azeotropes I-V (0.859), I-VI (0.587), II-VI (0.631), III-VI (0.583), II-VII (0.601), and IV-VII (0.630). The sp. heats of azeotropes are higher than the additive values, in agreement with Kresman and Zhdanov's observation (*J. Gen. Chem. U.S.S.R.* 11, 471 (1941)). A. Kresman

6
2-may
2

74

ZIELENIOWSKI, Ryszard, mgr.

Research on the improvement of gas burning and utilization.
Gaz woda tech sanit 36 no.5:182-185 My '62.

1. Centralne Laboratorium Gazownictwa, Oddzial Krakow.

ZIELENKIEWICZ, W.

Efforts to save wood. p. 23.

(BUDOWNICTWO WIEJSKIE. Vol. 9, No. 5, May 1957. Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 10, October 1957. Uncl.

POLAND/Atomic and Molecular Physics - High Pressure Physics.

D-

Abs Jour : Ref Zhur Fizika, No 3, 1960, 5681

Author : Siviotoslawski, W., Zielenkiewicz, W.

Inst : Institute of Chemical Physics, Polish Academy of Sciences

Title : Thermostats Used with the Labyrinth Flow Calorimeter

Orig Pub : Bull. Acad. polon. sci. Ser. sci. chem., geol. et geogr.,
1959, 7, No 2, 107-110

Abstract : Description of a thermostat for a labyrinth-flow calorimeter (Abstract 5683). The thermostat contains 400 liters of water. To stir such an amount of water, four propeller stirrers are used. In addition to the automatic apparatus for the control of the temperature, the thermostat contains also a Beckman ultrathermometer for detecting very small water temperature fluctuations. The changes in temperature in the thermostat did not exceed $\pm 0.001^{\circ}\text{C}$ in 14 days.

-- T.V. Zakharova

Card 1/1

- 44 -

COUNTRY : POLAND
 CATEGORY : Laboratory Equipment. Apparatus, Their
 ABS. JOUR. : RZKhim., No. 1 1960, No. 987
 AUTHOR : Swietoslawski, W.; Zielenkiewicz, W.
 INST. : Polish AS
 TITLE : On a New Labyrinth Flow Calorimeter
 ORIG. PUB. : Bull. Acad. polon. sci. Ser. sci. chim., geol.
 ABSTRACT : at geogr., 1959, 7, No 2, 101-105
 : A flow calorimeter, in which water washing the
 reaction vessel (volume 45 ml) passes through
 a jacket in the form of a labyrinth, has been
 constructed. The difference of the temperatures
 of flow water at the inlet and outlet of the
 labyrinth is measured correct to $\pm 0.001^\circ$ by
 means of a battery consisting of 25 copper-
 constantan thermocouples. To measure the volume
 of the flowing water, a special apparatus was

CARD: 1/2

F-11

RZKhim., No. 1 1960
 TITLE :
 APPROVED FOR RELEASE: 09/19/2001 No. 987 CIA-RDP86-00513R002065110010

ORIG. PUB. :
 ABSTRACT cont'd : constructed which permits the measurement of
 this value correct to $\pm 0.1\%$. The calorimeter
 is located in a 700-liter* thermostat whose
 temperature is maintained constant, correct
 to $\pm 0.001^\circ$, by means of a mercury-toluene
 thermoregulator. The water thermostat is lo-
 cated inside the measurement of small thermal
 meter permits the measurement of the order
 effects of protracted processes of the order
 of 1 cal/hour.-- A. Voroby'ev
 *water

CARD:

2/2

SWIETOSLAWSKI, W.; ZIELENKIEWICZ, W.

Thermostats used with the labyrinth flow calorimeter. Bul Ac Pol
chim 7 no.2:107-110 '59. (EEAI 9:7)
(Calorimeters and calorimetry)
(Thermostat)

COUNTRY : POLAND F
 CATEGORY : Laboratory Equipment. Apparatus, Their Theory,
 Construction and Application
 ABS. JCUR. : RZKhim., No. 1 1960, No. 988
 AUTHOR : Swietoslowski, W.; Zielenkiewicz, W.
 INST. : Polish AS
 TITLE : Thermostats Used with the Labyrinth Flow Calo-
 rimeter
 ORIG. PUB. : Bull. Acad. polon. sci. Ser. sci. chim., geol.
 et geogr., 1959, 7, No 2, 107-110
 ABSTRACT : A description of the thermostats used in working
 with the labyrinth flow calorimeter (see abstr.
 987) is given. The calorimeter is located in a
 water thermostat whose temperature is maintained
 constant, correct to $\pm 0.001^\circ$, by means of a
 mercury-toluene thermoregulator and electronic
 relay. Diagrams of the electronic relay and of
 the voltage stabilizer /stabilivolt/ of the
 power supply of the electronic lamps are given.

CARD: 1/2

F-12

ZIELENIEWSKI, Jan

Training conference in praxiology, Jablonna near Warsaw November
6-11, 1962. Nauka polska 11 no.2:114-116 Mr-Apr '63.

1. Pracownia Ogolnych Problemow Organizacji Pracy, Polska Akademia
Nauk, Warszawa.

ZIELENIOWSKI, Jan, Assistant professor

The Research Centre for General Theory of Organization, Review Pol
Academy 6 no.1:49-52 Ja-Mr '61.

1. Polish Academy of Sciences, Research Center for General Theory of
Organization, Warsaw, Palac Kultury; nauki.

(Polish Academy of Sciences) (Poland--Research)
(Poland--Organization)

ZIELENIOWSKI, Jerzy

Effect of adrenal regeneration on ovarian function in white rats.
Endokr.pol. 14 no.5:467-471 '63.

1. Zakład Endokrynologii Akademii Medycznej w Łodzi. Kierownik:
prof. dr T. Pawlikowski.

ZISLENIWSKI, R. ; KOZAKIEWICZ, K.

Thermostatic safety devices for gas-burning apparatus. p. 104.

GAS, WODA I TECHNIKA SANITARNA. (Stowarzyszenie Naukowo-Techniczne Inżynierów i Techników Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa, Poland.
Vol. 33, no. 3, March 1959.

Monthly List of East European Accessions EEAI LC, Vol. 8, no. 7, July 1959.

Uncl.

ZIELENIEWSKI, R.

Adaptation of laboratory burners to the combustion of liquid and natural gas.
p. 153

GAZ, WODA I TECHNIKA SANITARNA. (Stowarzyszenie Naukowo-Techniczne Inzynierow
i Technikow Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa, Poland.
Vol. 33, No. 3, March 1959.

Monthly List of East European Accession' (EEAI) LC, Vol. 8, no. 7, July 1959

Uncl.